(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 15 September 2005 (15.09.2005)

PCT

(10) International Publication Number WO 2005/084775 A1

(51) International Patent Classification⁷: 21/26, 17/02

B01D 21/00.

(21) International Application Number:

PCT/EP2004/002417

- (22) International Filing Date: 9 March 2004 (09 03 2004)
- (25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): COOPER CAMERON CORPORATION [US/US]; 1333 West Loop South, Suite 1700, Houston, TX 77027-9109 (US)
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BIESTER, Klaus [DE/DE]; Am Maschsee 2, 29342 Wienhausen (DE)
- (74) Agent: HILGERS, Hans; Grünecker, Kinkeldey, Stockmair & Schwanhäusser, Maximilianstrasse 58. 80538 München (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW). Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SEPARATION DEVICE

46

47,54

(57) Abstract: A separation device for the separation of constituents of different density, in particular of a fluid fed from a well hole, exhibits a Container in which the fluid at least partially after entry via a feed line is separated into its constituents using centrifugal force in the radial direction and / or using gravitational force in the vertical direction. To improve this type of separation device such that it can be constructed more Compact and in a constructively more simple mannet and also that it simultaneously can reliably enable separation of all constituents and their removal from the separation device, a classifier device is arranged in a lower section of the Container interior, which at least exhibits one discharge line, extending radially outwards, for the discharge of the fluid into the Container interior and delivery lines, joined to the Container interior at different levels in the vertical direction, for the separated fluid constituents

WO 2005/084775 A1

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.